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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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GLENN PATENT GROUP 3475 EDISON WAY, SUITE L MENLO PARK, CA 94025			FLANDERS, ANDREW C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/688,423	Applicant(s) LOOMIS, STEPHEN	
	Examiner Andrew C Flanders	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berman (U.S. Patent 6,502,194) in view of Zainouline (U.S. Patent Application Publication 2001/0030660).

5. Regarding claim 1, 6 and 16, Berman discloses as the first song (Song 1) is being played, the playback unit continues to operate and, in background operations, continues to download the Song 1 data into the first buffer, and also downloads data for the other selected songs into the other buffers in an alternating fashion. Each song will be placed into a different sequential buffer. (col. 12 lines 10 – 16) (i.e. as soon as a song starts to play, start to download, consecutively, a first small portion of a number of songs which are, in the predetermined sequence, subsequent to the song in playing, said downloaded small portions being pre-cached in a buffer with is an area in said second memory), this ensures that some portion of each selected song will be downloaded and available as soon as possible, thereby permitting the user to skip to one of the other selected songs after playback has begun (col. 12 lines 16 – 19) (i.e. as soon as the user skips to a target song whose first small portion has been pre-cached, start to play the first small portion of said target song; and at the same time start to

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download the rest of said target song so that as soon as the playing of the first small portion of said target song ends, start to play the rest of said target song which is being downloaded from the server over the internet). Berman does not disclose an apparatus comprising a processor, a first memory that stores at least one program used by said processor to control the playing of the sequence of songs, and a second memory which is available to said at least one program for operations. Zainouline discloses a preview device having a CPU, RAM memory, and staging memory (page 3 paragraph 0031) (i.e. the apparatus comprising a processor, a first memory and a second memory), a preview device that is also adapted to retrieve and pre-load preview clips of various pre-recorded media products stored in the media product storage device (page 3 paragraph 0031) (i.e. a first memory that stores at least one program used by said processor to control the playing of the sequence of songs), a player program for playing the indicated preview clip and an optional secondary storage (i.e. a second memory which is available to at least one program for operations). One of ordinary skill in the art at the time of the invention would have been motivated to use Zainouline's preview device with Berman's Memory Buffering Control playback method in order to create a more pleasing online shopping experience. Rather than a user having to wait for each individual song to buffer as they skip between preview clips, the combination would allow a user to smoothly switch between media clips thereby saving the user time and avoiding annoying pauses between playback (Zainouline paragraph 26).

6. Regarding Claims 2, 12 and 22, in addition to the elements above regarding claim 1, Berman further discloses in the preferred embodiment each data packet

contains approximately ten seconds of compressed digital audio information (col. 11 lines 50 –52) (i.e. wherein said first small portion is approximately the data required for playing the first ten seconds).

7. Regarding Claim 3, 13, and 23, in addition to the elements above regarding claim 1, Berman discloses three buffers in a playback memory in Figure 11. The playback unit memory may be segregated into a number of sequential buffers, with each buffer preferably containing one song (col. 11 lines 30 – 32) and the number of buffers is determined by the 2MB buffer size and the amount of memory that the playback unit microprocessor can access, so the number of buffers available will be variable (col. 11 lines 34 –38). Since microprocessor accessible memories of, for example, 256 MB, are well known at the time of the invention, Berman's disclosure comprehends any number of buffers up to at least 128.

8. Regarding Claims 4, 14, and 24, in addition to the elements stated above regarding claim 1, Berman further discloses that the buffers correspond to the following musical selections (col. 11 lines 63 – 65) and that the buffers are sequential buffers (col. 11 line 31). Berman discloses that the buffers correspond to the following musical selections as well as hold the data of the following songs to be played in sequential order. Therefore it is obvious that the said number of songs is all songs subsequent to the song in playing.

9. Regarding Claims 5, 15, and 25, in addition to the elements stated above regarding claim 1, Berman further discloses The loop buffering operation progresses from left to right in Fig 12. Loop buffering is used to limit the size needed for each

buffer. In particular, a buffer is not expected to have sufficient capacity to contain the entire data needed for one song. Rather data in a given buffer is overwritten as it is processed and played. Thus, after the last segment of memory in a buffer for a song has been filled with a song data packet and that buffer is processed for listening, the next song data packet will be written to the first segment in that buffer (col. 12 lines 22 – 30) (i.e. wherein said buffer follows a first-in first-out algorithm and allows writing while reading).

10. Regarding Claims 7 and 17, Berman further discloses checking to see if the track is in the buffer and if so beginning to stream track data from memory (Fig. 5 elements 506 and 512) (i.e. as soon as the user skips from a song in the playing to a target song, checking whether a file for said target song exists in said buffer, wherein if the check result is yes, continuing on step (d); (d) playing the first small portion of said target song). As stated above regarding claim 1, Berman discloses data in a given buffer is overwritten as it is processed and played. Thus, after the last segment of memory in a buffer for a song has been filled with a song data packet and that buffer is processed for listening, the next song data packet will be written to the first segment in that buffer (col. 12 lines 25 – 30). Therefore, as the system starts downloading the rest of the said target song, it is obvious that the data that has been in the buffer prior to the target song is overwritten (i.e. deleted) as the newer data is being processed and played (i.e. deleting any pre-cached song prior to said target song in said pre-determined sequence). Elements (e) and (g) are clearly comprehended above regarding claim 1 and thus claims 7 and 17 are rejected.

11. Regarding Claims 8 and 18, in addition to the elements stated above regarding claims 7 and 17, Berman discloses that portions of each selected song will be downloaded as the first one begins to play (col. 11 lines 56 and 57), the number of buffers may be variable (col. 11 lines 37 and 38), this ensures that some portion of each selected song will be downloaded and available as soon as possible, thereby permitting the user to skip to one of the other selected songs after playback has begun (col.12 lines 16 – 19), and as the first song (Song 1) is being played, the playback unit continues to operate and, in background operations, continues to download the Song 1 data into the first buffer, and also downloads data for the other selected songs into the other buffers in an alternating fashion. Each song will be placed into a different sequential buffer. (col.12 lines 10 – 16). It is obvious that as soon as the user skips ahead to another song, the subsequent songs will be downloaded into the buffer sequentially in order to fill the number of buffers (i.e. as soon as step (d) starts, continuing on step (a), wherein if one or more songs subsequent to said target song are already pre-cached, skipping said one or more songs and downloading the subsequent ones, executively, to make up said number.)

12. Regarding Claims 9 and 19, in addition to the elements stated above regarding claims 8 and 18, Berman further discloses that if a user wants to hear Song1, Song2, and Song 3, the playback unit downloads a number of packets for Song1 into the first available buffer, Once a sizeable amount of compressed audio information is stored for that song, the playback unit begins to process the information and play the song (col.11 lines 66 and 67, col. 12 lines 1-4). It is obvious that if the user selects these three

songs, starts playing Song1, and doesn't skip ahead that Song 2 will follow after Song1 has completed playing based on the functionality of the buffer (i.e. if no skip command is given by the user while said target song is playing, as soon as the playing of said target song ends, playing the next song immediately subsequent to said target song.)

Element (j) is clearly comprehended above regarding claim 7 and thus claims 9 and 19 are rejected.

13. Regarding Claims 10 and 20, in addition to the elements stated above regarding claims 7 and 17, Berman discloses that As the first song (Song 1 is being played, the playback unit continues to operate and, in background operation, continues to download the Song 1 data into the first buffer, and also downloads data for the other selected songs in to the other buffers into an alternating fashion (col. 12 lines 10 – 14) and if a user wants to hear Song1, Song2, and Song 3, the playback unit downloads a number of packets for Song1 into the first available buffer, Once a sizeable amount of compressed audio information is stored for that song, the playback unit begins to process the information and play the song (col.11 lines 66 and 67, col. 12 lines 1-4). Therefore, if a user starts playing Song1 and instantly skips to Song2 there will be no information stored in the buffer for Song2 therefore it is inherent that the system will stop playing Song 1 and automatically download the information for Song2 (i.e. sending request to stop transmitting of said song in playing and start transmitting said target song and playing said target song while being downloaded as soon as said buffer allows so). Elements (l), (m), and (o) are clearly comprehended above regarding claim 7 and thus claims 10 and 20 are rejected.

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14. Regarding Claims 11 and 21, in addition to the elements stated above regarding claims 10 and 20, element (p) is clearly comprehended above regarding claim 9 element (j), element (q) is clearly comprehended above regarding claim 9 element (i), element (r) is clearly comprehended above regarding claim 7 element (e), element (s) is clearly comprehended above regarding claim 8 element (h), and element (t) is clearly comprehended above regarding claim 7 element (g) and thus claims 11 and 21 are rejected.

Response to Arguments

Applicant's arguments filed 27 December 2004 have been fully considered but they are not persuasive.

Applicant states:

“Looking at the cited references, Berman discloses a system for playback of network audio material on demand in response to user selection. Berman fails to teach or suggest a buffer within a second memory, which pre-caches consecutively downloaded small portions of songs forming a sequence of songs to be played, as claimed in independent Claims 1, 6 and 16.”

Examiner has considered the argument and considers it moot. As stated in the office action dated 24 September 2004, Berman disclose as the first song is being played, the playback unit continue to operate and, in background operations continues to download the Song 1 data into the first buffer, and also downloads data for the other selected songs into the other buffers in alternating fashion. Each song will be placed

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into a different sequential buffer. Contrary to what applicant states in said arguments, this is exactly what the claims state (i.e. pre-caching consecutively downloaded small portions of songs forming a sequence of songs to be played). Now, applicant argues that Berman does not teach or suggest this buffer within a second memory. However, as stated in the office action the secondary reference, Zainoulline, discloses a preview device having a secondary storage. Zainoulline further discloses the following regarding the secondary storage. The preview device 2 is also adapted to retrieve and pre-loaded preview clips of various pre-recorded media products stored in the media product storage device 16 into the immediately accessible staging memory 8 of the preview device 2 such as in the secondary storage 25 (paragraph 31). This is essentially what the Berman reference teaches but does not give the level of detail as discloses in Berman. Finally, as stated in the actions, it would have been obvious to combine Berman's buffer scheme in Zainoulline's second memory. Berman's addition would create a more pleasing shopping experience as stated in the action and paragraph 26 of Zainoulline, and to further clarify the rejection, it would have been obvious to one of ordinary skill in the art to divide up a given computer memory into various buffers for processing purposes.

Applicant also states:

“At the paragraphs cited in the Office Action, especially at col. 12 lines 10 – 25 Berman teaches away from the present invention, specifically that data for other selected songs is downloaded into separate buffers in alternating fashion, and that a buffer is not expected to have sufficient capacity to contain the entire data needed for one song.”

Examiner has considered the argument and considers it moot. As stated above, the separate buffers are still within the second memory. Furthermore, while applicant states that Berman discloses the buffer is not large enough to contain the entire data needed for one song, applicant's claimed invention does not specifically claim downloading the following songs in their entirety and storing them. Moreover, this is not necessary to function as Applicant has claimed. Berman downloads portions of songs ^{so} ~~the~~ be played in consecutive buffers, plays back the first one as it completes downloading, and then moves on to the next as the user desires. This reads exactly on what applicant has claimed. ~b

Applicant also states:

"Zainoulline does not remedy any of the deficiencies of Berman. Zainoulline fails to teach or suggest a buffer within a second memory, which pre-caches consecutively downloaded small portions of songs forming a sequence of songs to be played as claimed in independent Claims 1, 6 and 16."

Examiner has noted the argument and considers it moot. Zainoulline does in fact remedy a deficiency of Berman, the second memory. Furthermore the reasoning behind the combination is stated above regarding the first argument.

Applicant also states:

"Furthermore, Berman fails to teach or suggest a combination with Zainoulline and Zainoulline fails to teach or suggest a combination with Berman."

Examiner has noted the argument and considers it moot. There is motivation to combine these references as stated in the office action. Zainoulline discloses a preview device for previewing media and Berman discloses audio on demand playback. Both of

these include analogous art and as stated in the action, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine these references to create a more pleasing shopping experience. The combination would allow the user to smoothly switch between media clips thereby saving the user time and annoying pauses between playbacks. Zainouline states this in paragraph 26 and Berman supports this in col. 12 lines 15 – 20. Also as stated above:

The preview device 2 is also adapted to retrieve and pre-loaded preview clips of various pre-recorded media products stored in the media product storage device 16 into the immediately accessible staging memory 8 of the preview device 2 such as in the secondary storage 25 (paragraph 31). This is essentially what the Berman reference teaches but does not give the level of detail as discloses in Berman. Finally, as stated in the actions, it would have been obvious to combine Berman's buffer scheme in Zainouline's second memory. Berman's addition would create a more pleasing shopping experience as stated in the action and paragraph 26 of Zainouline, and to further clarify the rejection, it would have been obvious to one of ordinary skill in the art to divide up a given computer memory into various buffers for processing purposes.

Applicant also states:

"It would be impermissible hindsight based on Applicant's own disclosure to combine the teachings of the two references and to arrive at the present invention."

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon

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hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant states hindsight reasoning. Applicants claimed invention is an apparatus for skipping songs without delay and Applicant's specification discloses "More particularly, the invention relates to an apparatus and method allowing a user to skip one or more songs in a pre-selected play list without having an unintended delay between skips." While it may appear as though hindsight reasoning has occurred, both Zainoulline's invention and Berman's invention operate with the same intention as applicant has stated. This is evident throughout both of the prior art's disclosures. Therefore the hindsight reasoning is moot.

Applicant also states:

"Moreover, such an alleged combination would still fail to teach or suggest a buffer within a second memory, which pre-caches consecutively downloaded small portions of songs forming a sequence of songs to be played as claimed in independent Claims 1, 6 and 16."

Examiner has considered this argument and considers it moot for the same reasons above regarding the first paragraph of arguments.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Flanders whose telephone number is (703) 305-0381. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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